

# Work Order ID 48389

June 26, 2009 12:40:05 PM



Page 1

Item ID: D3282-041

Accept



Setup Start



Revision ID: C

Item Name: Float Web (206L/407)

Stop



Start Date: 15/07/2009 Start Qty: 10.00



Cust Item ID:

Required Date: 03/08/2009 Req'd Qty: 10.00

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3282

Rev C

100

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Cut to length as per Dwg D3282.  
per QSI0018

12- inspect for surface damage as



110

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Machine as per Folio FA579 & Dwg D3282: 12-Debur

22/06 ✓

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control



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Page 2

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Customer:

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Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

QC8- Inspect parts - second check

0.00

✓



QC

Memo

0.00

Quality Control

140

Chemical Conversion Coat per QS1005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

- AWM  
9-6-7 (10)

150

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

(10) H 9-7-6

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June 26, 2009 12:40:05 PM



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Item Name: Float Web (206L/407)

Start Date: 15/07/2009 Start Qty: 10.00



Cust Item ID:

Required Date: 03/08/2009 Req'd Qty: 10.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160

0.00



Skidtubes

Skidtubes

Memo

0.00

1-Install doublers as per Dwg D3282. Apply LPS-3 between doublers and web LJA/RN/ALPS-3

MHI 528-AWM

9-7-7

AWM

9-7-7

(10) / 14

170

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

=> 80262102 (x10)

180

0.00



Identify as per dwg & Stock Location:

L-6-AWM 9-7-7

Packaging

Memo

0.00

Packaging

# Work Order ID 48389

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Page 4

Item ID: D3282-041

Accept



Setup Start



Revision ID: C

Stop



Item Name: Float Web (206L/407)

Start Date: 15/07/2009 Start Qty: 10.00



Cust Item ID:

Required Date: 03/08/2009 Req'd Qty: 10.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

190

QC21- Final Inspection - Work Order Release

0.00

QC

Memo

0.00

Quality Control

09/07/08

MF  
09-07-07

# Picklist Print

June 26, 2009 12:40:04 PM

Page 1

Work Order ID: 48389

Parent Item: D3282-041RevC

Parent Item Name: Float Web (206L/407)







Comments:

Start Date: 15/07/2009

Required Date: 03/08/2009

Start Qty: 10.00

Required Qty: 10.00

| Component Item ID/<br>Item Name  | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Remaining<br>Qty To Pick  | Qty<br>Issued | Date<br>Issued | Status |
|--|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|---|---------------|----------------|--------|
| ✓ MS20470AD4-7<br>                            |                        | Purchased     | No          |                     |                  | 100             | Each               | 0.0000         | 570.0000<br> |               |                |        |
| ✓ Rivet, Universal Head<br>D2792-130RevA1<br> |                        | Manufactured  | No          |                     |                  | 160             | Each               | 0.0000         | 10.0000<br>  |               |                |        |
| ✓ EXTRUSION<br>D3283-1RevE<br>                |                        | Manufactured  | No          |                     |                  | 160             | Each               | 0.0000         | 20.0000<br>  |               |                |        |
| Doubler  |                        |               |             |                     |                  |                 |                    |                |   |               |                |        |

576 B-M1107 31  
 Anm 9-7-7  
 9-7-6 ① B47691  
 ② 48423

Date: Monday, 08/06/2009 9:24:39 AM  
 User: Julie Dawson

## Process Sheet

|  |  |
|--|--|
| Customer : CU-DAR001 Dart Helicopters Services       | Drawing Name : FLOAT WEB               |
| Job Number : 48389                                   |  |
| Estimate Number : 10791                              |  |
| P.O. Number :  | Part Number : D3282041                 |
| This Issue : 08/06/2009 S.O. No. :                   | Drawing Number : D3282 REV C           |
| Prsht Rev. : NC                                      | Project Number : N/A                   |
| First Issue : / / Type : SKIDTUBES                   | Drawing Revision : C                   |
| Previous Run : 47593                                 | Material :                             |
| Written By :   | Due Date : 19/06/2009 Qty: 10 Um: Each |
| Checked & Approved By : <u>JUL 09.06.08</u>          |  |
| Comment : Est Rev:B 05.09.23 Procedure change KJ/JLM |  |

## Additional Product

Job Number:



|         |                       |               |
|---------|-----------------------|---------------|
| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|

|     |          |           |
|-----|----------|-----------|
| 1.0 | D2792130 | EXTRUSION |
|-----|----------|-----------|



Comment: Qty.: 1.0000 Each(s)/Unit : Total : 10.0000 Each(s)

Pick:

|                     |             |             |        |
|---------------------|-------------|-------------|--------|
| Qty                 | Part Number | Description | Batch  |
| 1                   | D2792-130   | Extrusion   | B42366 |
| Identify as D3282-1 |             |             |        |

fm 09-06-08 (10)

|     |             |                       |
|-----|-------------|-----------------------|
| 2.0 | SKIDTUBES 1 | SKIDTUBESS RESOURCE 1 |
|-----|-------------|-----------------------|



Comment: LANDING GEAR RESOURCE 1

1-Cut to length as per Dwg D3282.

2- inspect for surface damage as per QSI0018

> fm 09-06-08 (10)

|     |       |                                |
|-----|-------|--------------------------------|
| 3.0 | HAAS1 | HAAS CNC VERTICAL MACHINING #1 |
|-----|-------|--------------------------------|



Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine as per Folio FA579 & Dwg D3282

2-Deburr

mt 09/06/19 SP 09/06/18 (10)

|     |     |  |
|-----|-----|--|
| 4.0 | QC2 | INSPECT PARTS AS THEY COME OFF MACHINE |
|-----|-----|--|



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

mt 09/06/19 (10)

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

Date: Monday, 08/06/2009 9:24:39 AM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT WEB

Job Number: 48389

Part Number: D3282041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

and 09/05/05

(10)

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

AUM 9-7-7

(10)

7.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

n 9-7-6

8.0

D32831

Doubler



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

2 D3283-1

Doubler

B-47691-11  
B-48423-9

22 9-7-6

9.0

MS20470AD47

Rivet, Universal Head



Comment: Qty.: 57.0000 Each(s)/Unit Total : 570.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

57 MS20470AD4-7

Rivet

B-M110731

576  
AUM-9-7-7

10.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Install doublers as per Dwg D3282. Apply LPS-3 between doublers and web

A/RN/ALPS-3

M111528 AUM 9-7-7

11.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

8026262 (10)



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

Date: Monday, 08/06/2009 9:24:39 AM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT WEB

Job Number: 48389

Part Number: D3282041

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

13.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

|                               |               |                               |
|-------------------------------|---------------|-------------------------------|
| <b>DART AEROSPACE LTD</b>     |               | <b>Work Order:</b> 48389      |
| <b>Description:</b> Float Web |               | <b>Part Number:</b> D3282-041 |
| <b>Inspection Dwg:</b> D3282  | <b>Rev:</b> C | <b>Page 1 of 1</b>            |

### FIRST ARTICLE INSPECTION CHECKLIST

☒

First Article

☐

Prototype

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|-----------|------------------|--------|--------|----------------------|----------|
| 126.6             | +/-0.100  | 126.6            | ✓      |        |                      |          |
| 1.500             | +/-0.010  | 1.500            | ✓      |        |                      |          |
| 3.000             | +/-0.010  | 3.000            | ✓      |        |                      |          |
| 6.000             | +/-0.010  | 6.00             | ✓      |        |                      |          |
| 1.250             | +/-0.010  | 1.250            | ✓      |        |                      |          |
| 30.000            | +/-0.010  | 30.000           | ✓      |        |                      |          |
| 1.500             | +/-0.010  | 1.500            | ✓      |        |                      |          |
| 72.01             | +/-0.030  | 72.01            | ✓      |        |                      |          |
| 61.75             | +/-0.030  | 61.75            | ✓      |        |                      |          |
| 57.50             | +/-0.030  | 57.50            | ✓      |        |                      |          |
| 49.19             | +/-0.030  | 49.19            | ✓      |        |                      |          |
| 43.94             | +/-0.030  | 43.94            | ✓      |        |                      |          |
| 39.69             | +/-0.030  | 39.69            | ✓      |        |                      |          |
| 26.68             | +/-0.030  | 26.68            | ✓      |        |                      |          |
| 0.55              | +/-0.030  | 0.550            | ✓      |        |                      |          |
| 1.970             | +/-0.010  | 1.970            | ✓      |        |                      |          |
| 2.38              | +/-0.030  | 2.380            | ✓      |        |                      |          |
| 0.05              | +/-0.030  | 0.025            | ✓      |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |

|                               |                              |                            |     |
|-------------------------------|------------------------------|----------------------------|-----|
| <b>Measured by:</b> <i>SP</i> | <b>Audited by:</b> <i>mf</i> | <b>Prototype Approval:</b> | N/A |
| <b>Date:</b> 09/06/11         | <b>Date:</b> 09/07/05        | <b>Date:</b>               | N/A |

| Rev | Date     | Change    | Revised by | Approved           |
|-----|----------|-----------|------------|--------------------|
| A   | 07.04.02 | New Issue | KJ/JLM     | <i>[Signature]</i> |



**DART AEROSPACE USA, INC.**  
PORT HADLOCK, WA

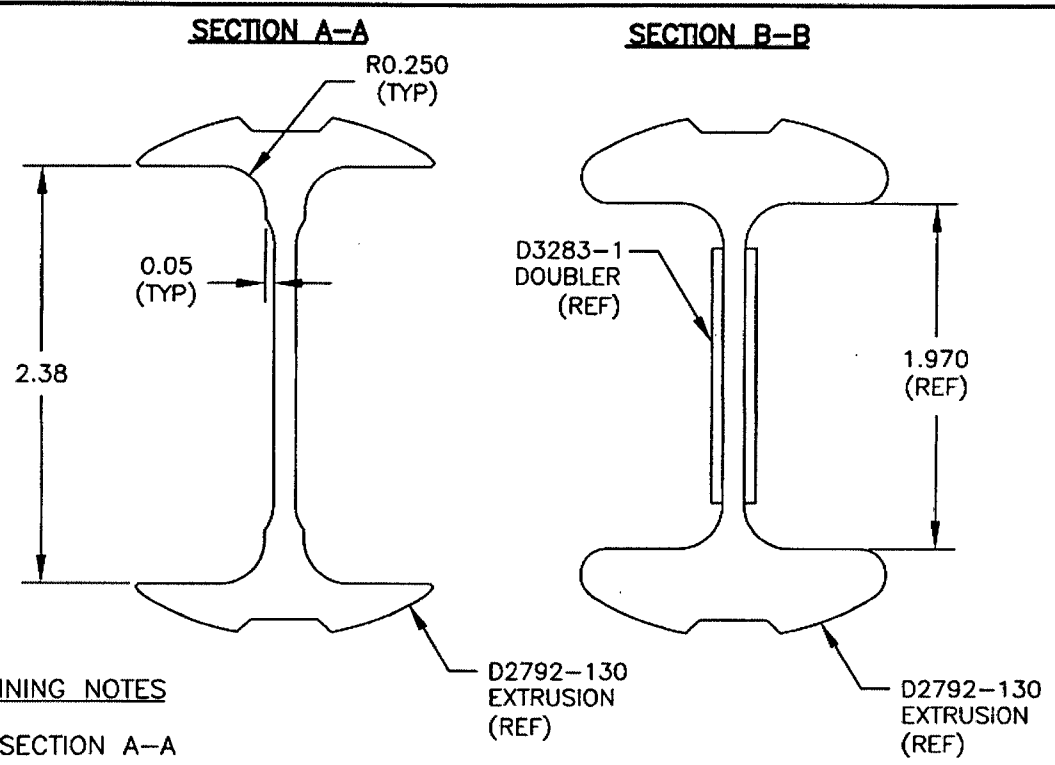
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WORKSHEET NO. 278389

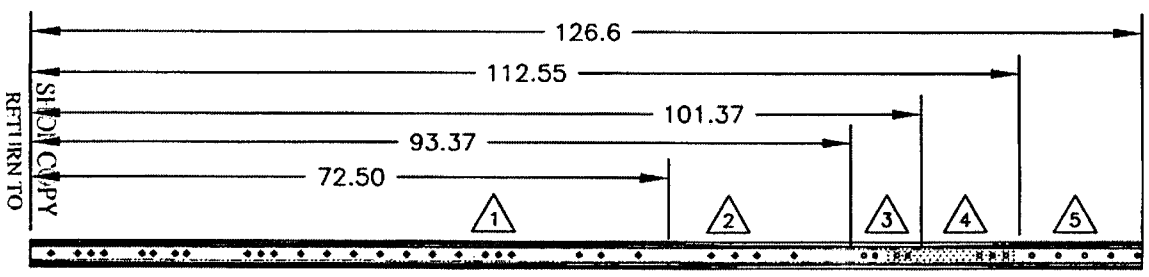
**DART**

|         |                    |             |                     |                          |
|---------|--------------------|-------------|---------------------|--------------------------|
| DESIGN  | CP                 | DRAWN BY    | CP                  | DART AEROSPACE USA, INC. |
| CHECKED | <i>[Signature]</i> | APPROVED    | <i>[Signature]</i>  | PORT HADLOCK, WA         |
| DATE    | 05.08.09           | DRAWING NO. | D3282               | REV. C                   |
|         |                    | TITLE       | FLOAT WEB, 206L/407 | SHEET 2 OF 2             |
|         |                    |             |                     | SCALE 1:20               |



**D3282-1 MACHINING NOTES**

- 1 UNIFORM SECTION A-A
- 2 UNIFORM TAPER FROM SECTION A-A TO SECTION B-B
- 3 UNIFORM SECTION B-B
- 4 UNIFORM TAPER FROM SECTION B-B TO SECTION A-A
- 5 DRILL #30 (Ø0.128 REF) HOLES (57 PLACES) TO LINE UP WITH D3283-1, SEE DETAIL D FOR REFERENCE
- 6 UNIFORM SECTION A-A
- 6 R1.00 BETWEEN SECTIONS



RELEASED  
05-08-12

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